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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,635	11/30/2004	Allan Bernard	016325-013900US	2823

20350 7590 07/27/2007

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER	
CHANDRA, GYAN	
ART UNIT	**PAPER NUMBER**
1646	

MAIL DATE	DELIVERY MODE
07/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,635	BERNARD ET AL.	
	Examiner	Art Unit	
	Gyan Chandra	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-21* is/are pending in the application.

4a) Of the above claim(s) *19 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17,18 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Re:Bernard et al.

Date of Priority: 6/5/2002 (60/386,311)

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, claims 17-18, and 21 and further election of a polypeptide of SEQ ID NO: 2 in the reply filed on 4/26/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Status of Application, Amendments, And/Or Claims

Claims 17-21 are pending.

Claims 19-20 are withdrawn from further consideration as being drawn to a nonelected Invention.

Claims 17-18 and 21 are examined to the extent they read on elected polypeptide of SEQ ID NO: 2.

Priority

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/386,085, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. It is noted that the US Provisional Application No. 60/386,331 filed on

6/5/2002 discloses for the first time, the polypeptide of SEQ ID NO: 2 (CTGF) as being instantly claimed. Therefore, the instant application gets the priority of US Provisional 60/386,331, which is 6/5/2002.

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (page 12, line 11). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Objections

Claim 17 is objected to because the claim recites non-elected inventions (i.e., SEQ ID NO: 4 and 6, and method steps using polynucleotides).

Claim 17 is objected for reciting " a method of diagnosing an individual" where as the method is directed for diagnosing Type 2 diabetes or pre-diabetic condition. The syntax of the claim may be improved by reciting " a method of diagnosing type 2 diabetes or pre-diabetic condition in an individual, the method comprising,"

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17-18 and 21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for diagnosing the level of a polypeptide of SEQ ID NO: 2 in an individual, does not reasonably provide enablement for diagnosing for Type 2 diabetes or pre-diabetic condition in an

individual. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make/use the invention commensurate in scope with these claims.

The first paragraph of 35 U.S.C. 112 states, "The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same...". The courts have interpreted this to mean that the specification must enable one skilled in the art to make and use the invention without undue experimentation. The courts have further interpreted undue experimentation as requiring "ingenuity beyond that to be expected of one of ordinary skill in the art" (Fields v. Conover, 170 USPQ 276 (CCPA 1971)) or requiring an extended period of experimentation in the absence of sufficient direction or guidance (In re Colianni, 195 USPQ 150 (CCPA 1977)). Additionally, the courts have determined that "... where a statement is, on its face, contrary to generally accepted scientific principles", a rejection for failure to teach how to make and/or use is proper (In re Marzocchi, 169 USPQ 367 (CCPA 1971). Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ 150, 153 (CCPA 1977) and have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986).

Among the factors are the nature of the invention, the state of the prior art, the predictability or lack thereof in the art, the amount of direction or guidance present, the presence or absence of working examples, the breadth of the claims, and the quantity of experimentation needed.

The instant disclosure fails to meet the enablement requirement for the following reasons:

Claims 17-18 and 21 are broadly directed to a method of diagnosing Type 2 diabetes or pre-diabetic condition in an individual, the method comprising, (i) detecting in a sample from the individual the level of SEQ ID NO: 2, and (ii) wherein a modulated level of the polypeptide of SEQ ID NO: 2

compared to a level of the polypeptide in either a lean individual or a previous sample for the individual indicates that the individual is diabetic or pre-diabetic.

The state of the prior art and the predictability or lack thereof in the art: Wahab et al. (Biochem. J. 359: 77-87, 2001) teach cloning and expression of connective tissue growth factor (CTGF) which is upregulated in human mesangial cells exposed to high concentration of glucose (page, 77, introduction). They state that the physiological function of CTGF in not yet fully elucidated. However, Wahab et al teach that increased levels of CTGF protein are present in both murine and human diabetic glomeruli (page 85, right column). Wahab et al teach normal human or control NOD mouse kidney hardly show any presence of CTGF message, however the CTGF immunostaining increases with the duration of diabetes in NOD mice. Murphy et al (J. Biol. Chem. 274:5830-5834, 1999) teach that the accumulation of mesangial matrix is a pivotal event in the pathology of diabetic nephropathy. They teach subtractive expression cloning of CTGF which is stimulated by high level of glucose and TGF-β1, and that CTGF is inhibited by anti-TGF-β1 antibody (see abstract). The art does not teach any correlation between circulating level of the polypeptide of SEQ ID NO: 2 (CTGF) and Type 2 diabetes. The art does not teach if there is any relationship between CTGF levels in lean vs. pre-diabetic or diabetic individuals. Therefore, it is unpredictable if CTGF level in an individual can predict with some confidence whether the individual is pre-diabetic or has Type 2 diabetes. Thus, a large amount of experimentation would be required to establish a relationship between the level of the polypeptide of SEQ ID NO: 2 in an individual and whether said individual is diabetic or pre-diabetic that encompass the instant invention to enable the invention as broadly being claimed.

The amount of direction and guidance present and the presence or absence of working examples: Given the teachings found in the art, detailed teachings are required to be present in the disclosure in order to enable the skilled artisan to practice the invention as claimed. These teachings are absent. The specification on pages 54-56, and 58 discloses that the polypeptide of SEQ ID NO: 2 (CTGF) is down

regulated upon troglitazone (which sensitizes insulin response) treatments in diabetic patients compared to control group of patients. The specification on pages 58-59 discloses that an increase in the level of CTGF expression inhibits glucose transport in muscle cells. The specification discloses that a decrease in CTGF level would be beneficial for patients with Type 2 diabetes. The specification does not teach any example where the levels of CTGF are predictive of an individual for being diabetic or pre-diabetic. The specification fails to disclose what level of CTGF in blood or urine of an individual is indicative of said individual having Type 2 diabetes or being pre-diabetic. Therefore, one of the skill in the art would not be able to practice the instantly claimed invention. Further, the specification does not define the term "modulated level" which could be interpreted as an increased level, decreased level or depending on a symptom or severity it could change in either direction. Therefore, it is unpredictable how one of the skill in the art would not be able practice the instantly claimed invention.

The breadth of the claims and the quantity of experimentation needed: Due to the large quantity of experimentation necessary to establish a relationship between the level of the polypeptide of SEQ ID NO: 2 (CTGF) in an individual and whether said individual is diabetic or pre-diabetic, the lack of direction/guidance presented in the specification regarding the same, the absence of working examples directed to same, the complex nature of the invention, the state of the prior art which establishes the unpredictability about any relationship of CTGF polypeptide levels and Type 2 diabetes, undue experimentation would be required of the skilled artisan to make and/or use the claimed invention in its full scope.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

It is noted that "a modulated level" of the polypeptide is being interpreted as "an increased level" of the polypeptide of SEQ ID NO: 2. Claims 17-18 and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Wahab et al (Biochem. J. 359: 77-87, 2001)

Claims 17-18 and 21 are broadly directed to a method of diagnosing Type 2 diabetes or pre-diabetic condition in an individual, the method comprising, (i) detecting in a sample from the individual the level of SEQ ID NO: 2, (ii) wherein a modulated level of the polypeptide of SEQ ID NO: 2 compared to a level of the polypeptide in either a lean individual or a previous sample for the individual indicates that the individual is diabetic or pre-diabetic, and (iii) wherein the sample is a blood, urine or tissue sample.

Wahab et al teach that hyperglycemia is implicated as the major factor initiating the development of diabetic nephropathy (DN) in humans and in animal models of diabetes mellitus (page 77, left column). Wahab et al teach measuring CTGF levels in renal biopsy specimens from human DN patients (page 77, right column). Wahab et al teach that human CTGF gene has been cloned and is 36-38 kDa secreted protein (page 77, left column). The instantly claimed CTGF of polypeptide of SEQ ID NO: 2 is well known in the art (see Grotendorst et al US Patent No. 5,585270, and the attached sequence alignment). It is noted that Grotendorst et al is applied to support the skill of the art. Wahab et al teach using anti-CTGF antibody to measure the level of CTGF polypeptide (page 79, Immunohistochemistry). Wahab et al teach measuring CTGF using anti-CTGF antibody in sections of renal cortex tissue from six NOD mice with different duration of diabetes (table 2, page 80). Therefore, the teachings of Wahab et al meet the limitation of claim 21. They teach that CTGF was just detectable at the early onset of hyperglycemia (figure 2B) and that the expression of CTGF polypeptide increases markedly with duration of diabetes

(figure 2D-2F). The teachings of Wahab et al. do not meet the limitation "individual." But the claims do not recite "individual human", therefore, the term "individual" can be interpreted as an "individual mouse".

```
RESULT 2
US-08-386-680-2
; Sequence 2, Application US/08386680
; Patent No. 5585270
;  GENERAL INFORMATION:
;    APPLICANT:  Grotendorst, Gary R.
;    APPLICANT:  Bradham Jr., Douglas M.,
;    TITLE OF INVENTION:  CONNECTIVE TISSUE GROWTH FACTOR
;    NUMBER OF SEQUENCES:  2
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Spensley Horn Jubas & Lubitz
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,680
;      FILING DATE:  10-FEB-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/167,628
;      FILING DATE:
;      APPLICATION NUMBER:  US/07/752,427
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Wetherell, Jr. Ph.D., John W.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  PD-1294
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619-455-5100
;      TELEFAX:  619-455-5110
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  349 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-386-680-2

  Query Match             100.0%;  Score 1968;  DB 1;  Length 349;
  Best Local Similarity   100.0%;  Pred. No. 5.1e-162;
  Matches  349;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MTAASMGPVRVAFVVLLALCSRPAVGQNCSGPCRCPDEPAPRCPAGVSLVLDGCGCCRVC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MTAASMGPVRVAFVVLLALCSRPAVGQNCSGPCRCPDEPAPRCPAGVSLVLDGCGCCRVC 60

Qy         61 AKQLGELCTERDPCDPHKGLFCDFGSPANRKIGVCTAKDGAPCIFGGTVYRSGESFQSSC 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 AKQLGELCTERDPCDPHKGLFCDFGSPANRKIGVCTAKDGAPCIFGGTVYRSGESFQSSC 120

Qy        121 KYQCTCLDGAVGCMPLCSMDVRLPSPDCPFPRRVKLPGKCCEEWVCDEPKDQTVVGPALA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 KYQCTCLDGAVGCMPLCSMDVRLPSPDCPFPRRVKLPGKCCEEWVCDEPKDQTVVGPALA 180

Qy        181 AYRLEDTFGPDPTMIRANCLVQTTEWSACSKTCGMGISTRVTNDNASCRLEKQSRLCMVR 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AYRLEDTFGPDPTMIRANCLVQTTEWSACSKTCGMGISTRVTNDNASCRLEKQSRLCMVR 240

Qy        241 PCEADLEENIKKGKKCIRTPKISKPIKFELSGCTSMKTYRAKFCGVCTDGRCCTPHRTTT 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 PCEADLEENIKKGKKCIRTPKISKPIKFELSGCTSMKTYRAKFCGVCTDGRCCTPHRTTT 300

Qy        301 LPVEFKCPDGEVMKKNMMFIKTCACHYNCPGDNDIFESLYYRKMYGDMA 349
              |||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 LPVEFKCPDGEVMKKNMMFIKTCACHYNCPGDNDIFESLYYRKMYGDMA 349
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Claims 17-18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Weitz et al (2003/0113816, published on 6/19/2003 which claims benefit of US Provisional 60/323,305 filed on 9/18/2001 and has support for the claimed benefit).

Claims 17-18 and 21 are broadly directed to a method of diagnosing Type 2 diabetes or pre-diabetic condition in an individual, the method comprising, (i) detecting in a sample from the individual the level of SEQ ID NO: 2, (ii) wherein a modulated level of the polypeptide of SEQ ID NO: 2 compared to a level of the polypeptide in either a lean individual or a previous sample for the individual indicates that the individual is diabetic or pre-diabetic, and (iii) wherein the sample is a blood, urine or tissue sample.

Weitz et al teach a 349 amino acid polypeptide which is 100% identical to the polypeptide of SEQ ID NO: 2 of the instant invention (see Sequence alignment). Weitz et al teach that pathology of CTGF is involved in conditions where an overgrowth of connective tissue cells or over-deposition of extracellular matrix is involved, including diabetic nephropathy [0004, 0012]. Weitz et al teach determining the level of CTGF protein in prognosis or monitoring the progression of a CTGF-associated disorder using a fragment that specifically binds to the polypeptide CTGF [0012- 0013]. Weitz et al contemplate using an antibody that specifically binds to the polypeptide of SEQ ID NO: 2 for detecting the said polypeptide (claims 1-3, 15-19 and [0119]). Weitz et al teach that the term "sample" may be derived from any source, for example, bodily fluids, secretions, tissues including but not limited to, blood, urine, saliva, serum, plasma and many others [0072]. Therefore, the prior art of record anticipates the instantly claimed invention to the extent it reads on a method of diagnosing CTNF associated diseases, including diabetes.

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RESULT 7
US-10-245-977-2
; Sequence 2, Application US/10245977
; Publication No. US20030113816A1
; GENERAL INFORMATION:
;  APPLICANT: Weitz, Stephen L
;  APPLICANT:  Usinger, William R
;  TITLE OF INVENTION: METHODS OF ASSAYING CONNECTIVE TISSUE GROWTH FACTOR
;  FILE REFERENCE: FP0812 US
;  CURRENT APPLICATION NUMBER: US/10/245,977
;  CURRENT FILING DATE:  2002-09-18
;  PRIOR APPLICATION NUMBER: US 60/323,305
;  PRIOR FILING DATE: 2001-09-18
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
;   LENGTH: 349
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-245-977-2

  Query Match             100.0%;  Score 1968;  DB 4;  Length 349;
  Best Local Similarity   100.0%;  Pred. No. 9.8e-148;
  Matches  349;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MTAASMGPVRVAFVVLLALCSRPAVGQNCSGPCRCPDEPAPRCPAGVSLVLDGCGCCRVC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MTAASMGPVRVAFVVLLALCSRPAVGQNCSGPCRCPDEPAPRCPAGVSLVLDGCGCCRVC 60

Qy         61 AKQLGELCTERDPCDPHKGLFCDFGSPANRKIGVCTAKDGAPCIFGGTVYRSGESFQSSC 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 AKQLGELCTERDPCDPHKGLFCDFGSPANRKIGVCTAKDGAPCIFGGTVYRSGESFQSSC 120

Qy        121 KYQCTCLDGAVGCMPLCSMDVRLPSPDCPFPRRVKLPGKCCEEWVCDEPKDQTVVGPALA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 KYQCTCLDGAVGCMPLCSMDVRLPSPDCPFPRRVKLPGKCCEEWVCDEPKDQTVVGPALA 180

Qy        181 AYRLEDTFGPDPTMIRANCLVQTTEWSACSKTCGMGISTRVTNDNASCRLEKQSRLCMVR 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AYRLEDTFGPDPTMIRANCLVQTTEWSACSKTCGMGISTRVTNDNASCRLEKQSRLCMVR 240

Qy        241 PCEADLEENIKKGKKCIRTPKISKPIKFELSGCTSMKTYRAKFCGVCTDGRCCTPHRTTT 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 PCEADLEENIKKGKKCIRTPKISKPIKFELSGCTSMKTYRAKFCGVCTDGRCCTPHRTTT 300

Qy        301 LPVEFKCPDGEVMKKNMMFIKTCACHYNCPGDNDIFESLYYRKMYGDMA 349
              |||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 LPVEFKCPDGEVMKKNMMFIKTCACHYNCPGDNDIFESLYYRKMYGDMA 349
```

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gyan Chandra whose telephone number is (571) 272-2922. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol can be reached on (571) 272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gyan Chandra
Art Unit 1646
16 July2007
Fax: 571-273-2922

/Robert S. Landsman/
Primary Examiner, Art Unit 1647